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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Group: 1641  
Confirmation No.: 3355  
Application No.: 10/725,891  
Invention: IMMUNODETECTION AND  
QUANTIFICATION METHODS  
Applicant: Humphreys, J.  
Filed: December 2, 2003  
Attorney Docket: 3220-73872  
Examiner: David J. Venci

Certificate Under 37 CFR 1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

on April 19, 2005

Garla L. Twyman  
(Signature)

Garla L. Twyman  
(Printed Name)

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
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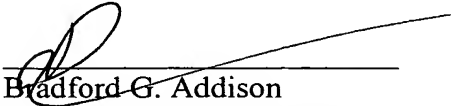
Sir:

This Statement is filed in the application identified above pursuant to 37 C.F.R. § 1.56. No representation is intended that a complete search has been made of the prior art or that no better art references than those listed below are available. A copy of each reference is provided for review by the Examiner. The filing of this Statement shall not be construed to be an admission that the information cited in the Statement is, or is considered to be, material to patentability as defined in §1.56(b).

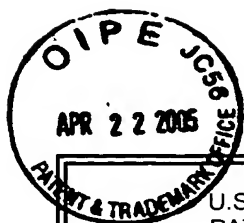
None of the cited art is believed to disclose or suggest the invention recited in the claims of the above-identified application. It is therefore believed that the claimed invention is patentably distinguishable over these references.

Please charge any fees due in connection with this Information Disclosure Statement to our Deposit Account No. 10-0435, with reference to our matter 3220-73872. An extra copy of this Information Disclosure Statement is enclosed for that purpose.

Respectfully submitted,  
BARNES & THORNBURG LLP

  
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INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
3220-73872

SERIAL No.  
10/725,891

APPLICANT  
Humphreys

FILING DATE  
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GROUP  
1461

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*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	AA	US 6,255,462	07/03/2001	Grose, Charles			
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	AR	Bergendahl et al., "A fast Western blot procedure improved for quantitative analysis by direct fluorescence labeling of primary antibodies", <i>J. Immunol. Methods</i> , Vol. 277, 2003, pgs. 117-125
	AS	Bradford, "A rapid and sensitive method for the quantification of microgram quantities of protein utilizing the principle of protein-dye binding." <i>Anal. Biochem.</i> , Vol. 72, 1976, pgs. 248-276
	AT	Brizzard et al., "Immunoaffinity purification of FLAG epitope-tagged bacterial alkaline phosphatase using a novel monoclonal antibody and peptide elution", <i>BioTechniques</i> , Vol. 16, No. 4, 1994, pgs. 730-734
	AU	Coorsen et al., "Quantitative fempto- to attomole immunodetection of regulated secretory vesicle proteins critical to exocytosis", <i>Anal. Biochem.</i> , Vol. 307, 2002, pgs. 54-62
	AV	Edwards et al., "Development of a comprehensive panel of antibodies against the major xenobiotic metabolizing forms of cytochrome P450 in humans", <i>Biochem. Pharmacol.</i> , Vol. 56, 1998, pgs. 377-387
	AW	Estabrook et al., "The measurement of difference spectra: Application to the cytochromes of microsomes", <i>Methods Enzymol.</i> , Vol. 52, 1978, pgs. 212-220
	AX	Gietz et al., "Improved method for high-efficiency transformation of intact yeast-cells", <i>Nucleic Acids Res.</i> , Vol. 20, No. 6, 1992, pg. 1425
	AY	Graham-Lorence et al., "P450s: Structural similarities and functional differences.", <i>FASEB J.</i> , Vol. 10, 1996, pgs. 206-214
	AZ	Hopp et al., "A short polypeptide marker sequence useful for recombinant protein identification and purification", <i>Bio/Technology</i> , Vol. 6, 1988, pgs. 1204-1210

Examiner

Date Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	BR	Humphreys et al., "New routes for lignin biosynthesis defined by biochemical characterization of recombinant ferulate 5-hydroxylase, a multifunctional cytochrome P450-dependent monooxygenase", <i>Proc. Natl. Acad. Sci. USA</i> , Vol. 96, 1999, pgs. 10045-10050
	BS	Laemmli et al., "Cleavage of structural proteins during the assembly of the head of bacteriophage", <i>Nature</i> , Vol. 227, 1970, pgs. 680-685
	BT	Lau et al., "Low carbon monoxide affinity allene oxide synthase is the predominant cytochrome P450 in many plant tissues", <i>Biochemistry</i> , Vol. 32, 1993, pgs. 1945-1950
	BU	Loew et al., "Electronic spectra of model oxy, carboxy P450, and carboxy heme complexes", <i>J. Am. Chem. Soc.</i> , Vol. 102, 1980, pgs. 3655-3657
	BV	Lowry et al., "Protein measurement with the Folin phenol reagent", <i>J. Biol. Chem.</i> , Vol. 193, 1951, pgs. 265-275
	BW	Mizutani et al., "Isolation of a cDNA and a genomic clone encoding cinnamate 4-hydroxylase from <i>Arabidopsis</i> and its expression manner in planta", <i>Plant Physiol.</i> , Vol. 113, 1997, pgs. 755-763
	BX	Morton et al., "Modification of the bicinchoninic acid protein assay to eliminate lipid interference in determining lipoprotein protein content", <i>Anal. Biochem.</i> , Vol. 204, 1992, 332-334
	BY	Omura et al., "The carbon monoxide-binding pigment of liver microsomes. II. Solubilization, Purification, and Properties", <i>J. Biol. Chem.</i> , Vol. 239, No. 7, 1964, pgs. 2379-2385
	BZ	Peisach et al., "Optical and magnetic probes of the structure of cytochrome P-450's", <i>Drug Metab. Dispos.</i> , Vol. 1, No. 1, 1973, pgs. 45-61

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BASED ON FORM PTO 1449

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  INFORMATION DISCLOSURE STATEMENT				ATTY. DOCKET NO. 3220-73872 APPLICANT Humphreys FILING DATE December 2, 2003		SERIAL No. 10/725,891  GROUP 1461	
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	CR	Pierrel et al., "Catalytic properties of the plant cytochrome P450 CYP73 expressed in yeast. Substrate specificity of a cinnamate hydroxylase", <i>Eur. J. Biochem.</i> , Vol. 224, 1994, 835-844					
	CS	Pompon et al., "Yeast expression of animal and plant P450s in optimized redox environments", <i>Methods Enzymol.</i> , Vol. 272, 1996, pgs. 51-64					
	CT	Prickett et al., "A calcium-dependent antibody for identification and purification of recombinant proteins.", <i>Bio/Techniques</i> , Vol. 7, No. 6, 1989, pgs. 580-586					
	CU	Ro et al., "Functional characterization and subcellular localization of poplar ( <i>Populus trichocarpa</i> X <i>Populus deltoides</i> ) cinnamate 4-hydroxylase", <i>Plant Physiol.</i> , Vol. 126, 2001, pgs. 317-329					
	CV	Stressor et al., "Monospecific antipeptide antibody to cytochrome P-450 2B6", <i>Drug Metab. Dispos.</i> , Vol. 27, No. 4, 1991, pgs. 517-525					
	CW	Tobin et al., "Electrophoretic transfer of proteins from polyacrylamide gels to nitrocellulose sheets: Procedure and some applications. <i>Proc. Natl. Acad. Sci. USA.</i> , Vol. 76, No. 9, 1979, pgs. 4350-4354					
	CX	Urban et al., "Maximizing the expression of mammalian cytochrome P-450 monooxygenase activities in yeast cells", <i>Biochimie</i> , Vol. 72, 1990, pgs. 463-472					
	CY	Urban et al., "Cloning, yeast expression, and characterization of the coupling of two distantly related <i>Arabidopsis thaliana</i> NADPH-cytochrome P450 reductases with P450 CYP73A5", <i>J. Biol. Chem.</i> , Vol. 272, No. 31, 1997, pgs. 19176-19186					
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	DR	Werck-Reichhart et al., "Glycerol allows low-temperature phase-separation of membrane-proteins solubilized in Triton-X114 – Application to the purification of plant cytochrome-P450 and cytochrome b <sub>5</sub> ", <i>Anal. Biochem.</i> , Vol. 197, 1991, pgs. 125-131					
	DS	Humphreys et al., "Immunodetection and quantification of cytochromes p450 using epitope tagging: immunological, spectroscopic, and kinetic analysis of cinnamate 4-hydroxylase", <i>J. Immunol. Methods</i> , Vol. 292, 2004, pgs. 97-107					
	DT	Amersham Biosciences, "Fluorescent ECL Plus Western Blot Detection with Storm Image Analysis Systems", Application Note: Protein Labeling and Detection, 80-6443-83, 1999, pgs. p1-p4					
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